

REMARKS

Specification

The Examiner has indicated that the title of the invention is not sufficiently descriptive, and that a new title is required that is clearly indicative of the invention to which the claims are directed. The title has been amended further consistent with the invention of claim 1. Reconsideration of this objection is accordingly respectfully requested. If the Examiner believes further changes to the Title to be required, such changes may be made by Examiner's amendment upon allowance of the application as set forth in MPEP 606.01.

Double Patenting

Claims 1, 2, 4-9, 11, 12 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 2, 6-10, 14, 17, 18 of copending Application No. 10/815010. Claims 1, 4, 5-9, 11, 13 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 9-18 of copending Application No. 10/814354. Terminal Disclaimers with respect to such copending, commonly assigned applications have been submitted herewith to advance prosecution.

Claim Rejections - 35 USC § 103

Claims 1-3, 10-12, 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sievers US 4970093 in view of Wilson et al EP 0 473 424. The Examiner states that it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the process of Sievers by incorporating the teachings of Wilson et al regarding control of components in order to maintain deposition of the desired ratio of components for coating deposition onto the substrate. This rejection is respectfully traversed.

Contrary to the Examiner's assertions, Sievers does not disclose a method for particle coating substrates, one embodiment comprising mixing a supercritical fluid with a solvent solution comprising a chemical reagent to produce smaller and more consistent particles (col. 7, 50- col. 8, 11) which is then passed through a restrictor orifice or nozzle where fine sized particles are discharged towards a substrate on which a coating of a desired material is formed. Rather, Sievers discloses a method that combines supercritical fluid transport and chemical vapor deposition techniques (col. 1, lines 8-10). In such method,

supercritical solutions of reagents or their precursors are first rapidly expanded, and chemical reaction subsequently occurs at or near a substrate surface to deposit a solid film thereon (col. 2, lines 43-47). The Examiner's further reference to col. 4, lines 39-68 of Sievers teaching lesser solubility of coating precursor materials in supercritical fluids as opposed to intended solvents is further misplaced, as such section is directed towards the use of polar modifier solvents such as methanol to increase the polarity of the supercritical solvent solubility in order to overcome a limitation (col. 4, line 54) when using reagent compounds other than nonpolar compounds. Such teaching does not in any way refer to particle formation in a particle formation vessel charged with a compressed fluid. Thus, the Examiner's characterization of the teachings of Sievers represents clear error. Sievers is further discussed at page 3, lines 5-15 of the present specification.

Accordingly, there is no teaching in Sievers of introducing into a particle formation vessel at least a first feed stream comprising at least a solvent and the desired substance which is itself to be deposited (as opposed to a reagent or a precursor of a reagent which is to be reacted near a surface after expansion), nor of dispersing the first feed stream in the compressed fluid in the particle formation vessel wherein the desired substance is less soluble in the compressed fluid relative to its solubility in the solvent and the solvent is soluble in the compressed fluid, allowing extraction of the solvent into the compressed fluid and precipitation of particles of the desired substance. Particle formation simply does not occur in the compressed fluid employed by Sievers, but rather after expansion thereof (and reaction of the reagents formerly in the compressed supercritical solution). Wilson also does not teach such feature, as particles are only formed upon spraying of the liquid coating compositions described therein. Thus, even if the teachings of Sievers and Wilson were to be combined, the present claimed invention would not be obtained. Accordingly, a prima facie case of obviousness has clearly not been established, and reconsideration of this rejection is respectfully requested.

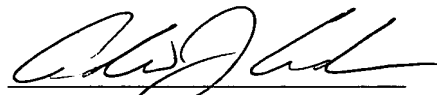
Claims 4-9, 13-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sievers US 4970093 in view of Wilson et al EP 0 473 424 and further in view of Fulton US2003/0222019. The Examiner states it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the coating process of Sievers in view of Wilson by incorporating

electrostatic charging as taught by Fulton et al to provide the advantage of electrostatically applying nano-sized particles onto substrates with a high degree of deposition resolution. This rejection is respectfully traversed.

As explained above, the Examiner's characterizations of the teachings of Sievers represent clear error, and a prima facie case of obviousness of the invention of claim 1 has not been established based on such reference (alone or in combination with Wilson et al.). Fulton relates to a RESS process wherein particles are formed upon rapid expansion of supercritical solution, rather than particle formation in a particle formation vessel charged with a compressed fluid, and accordingly fails to overcome the deficiencies of the basic proposed combination of Sievers and Wilson. Accordingly, the proposed combination of Sievers, Wilson and Fulton also clearly fails to establish a prima facie case of obviousness with respect to the present claimed invention, and reconsideration of this rejection is accordingly respectfully requested.

In view of the foregoing amendments and remarks, reconsideration of this patent application is respectfully requested. A prompt and favorable action by the Examiner is earnestly solicited. Should the Examiner believe any remaining issues may be resolved via a telephone interview, the Examiner is encouraged to contact Applicants' representative at the number below to discuss such issues.

Respectfully submitted,



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If the Examiner is unable to reach the Applicant(s) Attorney at the telephone number provided, the Examiner is requested to communicate with Eastman Kodak Company Patent Operations at (585) 477-4656.